

Reply to Office Action of October 20, 2008

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently Amended) A method of processing a parallel resistance heating cable, the cable comprising a heating element connected between at least two longitudinally extending conductors, the method comprising [[:];

applying a current along at least one of said conductors, such that the a surface temperature of the conductor is raised by ohmic heating to at least substantially the a thermal transition point that allows plastic flow of the heating element.

2. (Currently Amended) [[A]] The method as claimed in claim 1, wherein a current is applied along each of said conductors so as to raise the a surface temperature of each conductor to at least substantially the thermal transition point of the heating element.

3 (Currently Amended) [[A]] The method as claimed in claim 2, the method comprising connecting said conductors in series prior to applying said current.

4. (Currently Amended) [[A]] The method as claimed in ~~any one of the above claims~~ claim 1, wherein said current is applied so as to elevate the a surface of the at least one of said conductor to a temperature greater than the thermal transition point of the heating element.

Reply to Office Action of October 20, 2008

5. (Currently Amended) [[A]] The method as claimed in ~~any one of the above claims claim 1~~, wherein the ~~said~~ current is applied for a time period of between 0.1 and 60 seconds.

6. (Currently Amended) [[A]] The method as claimed in ~~any one of the above claims claim 1~~, wherein the method further comprises the step of comprising:
allowing the cable to cool to substantially ambient temperature after the application of said current.

7. (Currently Amended) [[A]] The method as claimed in ~~any one of the above claims claim 1~~, further comprising: ~~the step of~~
monitoring the an integrity of the a bond between the conductors and the heating element by determining the a resistance between the conductors when at least two different voltages are applied across the conductors.

8. (Currently Amended) [[A]] The method as claimed in ~~any one of the above claims claim 1~~, the method further comprising: ~~the step of~~
determining that the a performance of the heating cable is less than optimum.

9. (Currently Amended) [[A]] The method as claimed in ~~any one of the above claims claim 1~~, wherein said method steps are is performed whilst the heating cable is located in situ in a heating arrangement.

10. (Currently Amended) ~~[[A]]~~ The method as claimed in ~~any one of the above claims~~ claim 1, wherein said current is applied to heat the at least one of said conductor during the manufacture of the heating cable.

11. (Currently Amended) ~~[[A]]~~ The method as claimed in ~~any one of the above claims~~ claim 1, wherein the heating element comprises a semiconductor.

12. (Currently Amended) ~~[[A]]~~ The method as claimed in ~~any one of the above claims~~ claim 1, wherein the heating element comprises a polymeric matrix.

13. (Currently Amended) A heating cable ~~processed by the method as claimed in any one of the above claims~~ comprising:

first and second conductors; and

a heating element connected between the first and second conductors,

wherein at least one of the first and second conductors is configured to receive a current, such that a surface temperature of the at least one of the first and second conductors is raised by ohmic heating to at least substantially a thermal transition point that allows plastic flow of the heating element.

14-15. (Cancelled)